

What is claimed is:

1. A method in a data processing system for sending a document with a network address to a recipient, the method comprising the steps of:

5 determining to send the document to the recipient;
incorporating a timer value into the network address; and
sending the document with the incorporated network address to the recipient.

10 2. The method of claim 1, wherein the recipient is a computer.

15 3. The method of claim 1, wherein the recipient is a program in the data processing system.

15 4. The method of claim 1, wherein the address supplement is based on a time dependent increment.

20 5. The method of claim 1, further comprising the step of:
generating the document from a plurality of document elements stored in the predetermined server.

25 6. The method of claim 1, wherein the network address has a format such that a first part of the network address identifies a server in the network, and a second part of the network address identifies the document, which is sent by the server identified by the first part, and wherein the timer value is incorporated into the second part.

7. The method of claim 1, wherein the network is an Internet and the network address is a Uniform Resource Locator.

30 8. The method of claim 1, wherein the document is a web page and the network address is a URL.

9. The method of claim 1, wherein the network is one of a Local Area Network, a Metropolitan Area Network, and a Wide Area Network.

10. The method of claim 1, wherein the network address is within the document.

5 11. The method of claim 1, further comprising the step of:
determining whether the network address meets a predetermined condition,
wherein the network address is incorporated based on the network address meeting
the predetermined condition.

10 12. The method of claim 11, wherein the predetermined condition is met if
the network address comprises a link element, the link element having a format such
that the link element can be used by a user of the network who receives a document
containing the link element in order to generate a request containing the network
address associated with the link element.

15 13. The method of claim 1, further comprising the step of:
receiving a request for the document, wherein the document is sent in
response to the received request, the request comprising one of a network address
identifying the document and an amended network address derived from a network
20 address identifying the document.

14. The method of claim 13, further comprising the steps of:
determining whether the received request comprises a network address or an
amended network address;
25 when the received request comprises an amended network address, deriving
a network address from the amended network address by removing an address
supplement from the amended network address, the outputted document being
identified by the derived network address.

15. A method in a data processing system comprising a web server having a web page with a URL, the method comprising the steps performed by the web server of:

5 receiving a request to download the web page to a client;

determining whether the web page has been updated;

when the web page has been updated,

incorporating a time stamp into the URL of the web page; and

downloading the web page with the URL incorporated with the time stamp to the client to satisfy the request; and

10 when the web page has not been updated,

downloading the web page to the client to satisfy the request.

15. A computer-readable medium containing instructions that cause a data processing system to perform a method for sending a document with a network address to a recipient, the method comprising the steps of:

determining to send the document to the recipient;

incorporating a timer value into the network address; and

sending the document with the incorporated network address to the recipient.

20. 17. The computer-readable medium of claim 16, wherein the recipient is a computer.

18. The computer-readable medium of claim 16, wherein the recipient is a program in the data processing system.

25. 19. The computer-readable medium of claim 16, wherein the address supplement is based on a time dependent increment.

20. The computer-readable medium of claim 16, further comprising the
step of:

5 generating the document from a plurality of document elements stored in the
predetermined server.

10 21. The computer-readable medium of claim 16, wherein the network
address has a format such that a first part of the network address identifies a server
in the network, and a second part of the network address identifies the document,
which is sent by the server identified by the first part, and wherein the timer value is
incorporated into the second part.

15 22. The computer-readable medium of claim 16, wherein the network is an
Internet and the network address is a Uniform Resource Locator.

23. The computer-readable medium of claim 16, wherein the document is a
web page, and the network address is a URL.

20 24. The computer-readable medium of claim 16, wherein the network is
one of a Local Area Network, a Metropolitan Area Network, and a Wide Area
Network.

25 25. The computer-readable medium of claim 16, wherein the network
address is within the document.

26. The computer-readable medium of claim 16, further comprising the
step of:

30 determining whether the network address meets a predetermined condition,
wherein the network address is incorporated based on the network address meeting
the predetermined condition.

27. The computer-readable medium of claim 26, wherein the
predetermined condition is met if the network address comprises a link element, the
link element having a format such that the link element can be used by a user of the

network who receives a document containing the link element in order to generate a request containing the network address associated with the link element.

28. The computer-readable medium of claim 16, further comprising the
5 step of:

receiving a request for the document, wherein the document is sent in response to the received request, the request comprising one of a network address identifying the document and an amended network address derived from a network address identifying the document.

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29. The computer-readable medium of claim 28, further comprising the steps of:

determining whether the received request comprises a network address or an amended network address;

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when the received request comprises an amended network address, deriving a network address from the amended network address by removing an address supplement from the amended network address, the outputted document being identified by the derived network address.

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30. A computer-readable medium containing instructions that cause a data processing system comprising a web server having a web page with a URL to perform a method comprising the steps performed by the web server of:

receiving a request to download the web page to a client;

determining whether the web page has been updated;

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when the web page has been updated,

incorporating a time stamp into the URL of the web page; and

downloading the web page with the URL incorporated with the time stamp to the client to satisfy the request; and

when the web page has not been updated,

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downloading the web page to the client to satisfy the request.

31. A data processing system comprising:

a secondary storage device having a stored document with a network address;

a memory comprising a computer program that determines to send the document to a recipient, incorporates a timer value into the network address, and sends the document with the incorporated network address to the recipient; and
a processing unit that runs the computer program.

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32. The data processing system of claim 31, wherein the recipient is a computer.

10 33. The data processing system of claim 31, wherein the recipient is a program in the data processing system.

34. The data processing system of claim 31, wherein the network is an Internet and the network address is a Uniform Resource Locator.

15 35. The data processing system of claim 31, wherein the document is a web page and the network address is a URL.

20 36. The data processing system of claim 31, wherein the network is one of a Local Area Network, a Metropolitan Area Network, and a Wide Area Network.

37. A data processing system comprising:

a web server having:

a secondary storage device having a stored web page with a URL;

25 a memory comprising a computer program that receives a request to download the web page to a client, determines whether the web page has been updated, when the web page has been updated, incorporates a time stamp into the URL of the web page and downloads the web page with the URL incorporated with the time stamp to the client to satisfy the request, and when the web page has not been updated, downloads the web page to the client to satisfy the request; and

30 a processing unit that runs the computer program.

38. A data processing system for sending a document with a network address to a recipient, the data processing system comprising:

means for determining to send the document to the recipient;

means for incorporating a timer value into the network address; and
means for sending the document with the incorporated network address to the
recipient.

- 5 39. A data processing system comprising:
a web server having a web page with a URL, the web server having:
means for receiving a request to download the web page to a client;
means for determining whether the web page has been updated;
means for incorporating a time stamp into the URL of the web page,
10 when the web page has been updated;
 means for downloading the web page with the URL incorporated with
the time stamp to the client to satisfy the request, when the web page has been
updated; and
 means for downloading the web page to the client to satisfy the
15 request, when the web page has not been updated.

40. A computer-readable memory device encoded with a data structure
and a program that accesses the data structure, the program encoded in the
computer-readable memory device and run by a processor in a system, the data
20 structure having a plurality of entries, each entry comprising:
 a network address that is contained in a document, wherein the program
incorporates a time stamp into the network address before sending the document to
a recipient.

- 25 41. The computer-readable memory device of claim 40, wherein the
document is a web page and the network address is a URL.